

WHAT IS CLAIMED IS⁸

~~Patent Claims~~

Sub A12

5 1. A method for detecting target objects and for determining their direction, range, speed and the like for a radar device (3) in particular for use in motor vehicles, comprising the following method steps:

10 - arrangement of at least three transmitting and receiving devices (A, B, C, D, E) for radar beams in such a manner that their beam fields (a, b, c, d, e) form the detection area (4) of the radar device (3),

15 - successive activation and deactivation of the at least three transmitting and receiving devices (A, B, C, D, E) in such a manner that at least two adjacent transmitting and receiving devices are operated simultaneously, and

20 - evaluation of the echo signals from the transmitting and receiving devices (A, B, C, D, E) using the monopulse method.

25 2. The method as claimed in claim 1, characterized in that one, and only one, pair of adjacent transmitting and receiving devices (A, B, C, D, E) are activated simultaneously.

30 3. The method as claimed in one of claims 1 or 2, characterized in that at least one of the currently deactivated transmitting and receiving devices (A, B, C, D, E) is reactivated for activation of the at least two transmitting and receiving devices (A, B, C, D, E).

35 4. The method as claimed in one of claims 1 to 3, characterized in that the echo signals from the

transmitting and receiving devices (A, B, C, D, E) are evaluated individually on the basis of range, speed and intensity.

5. The method as claimed in one of claims 1 to 4, characterized in that the position angle of the target object relative to the radar device (3) is determined by comparison of the intensities of the at least two transmitting and receiving devices (A, B, C, D, E).

- 5 5. The method as claimed in one of claims 1 to 4, characterized in that the position angle of the target object relative to the radar device (3) is determined by comparison of the intensities of the at least two transmitting and receiving devices (A, B, C, D, E).

Station	Lat.	Long.	Time	Wind	Temp.	Bar.	Hum.	Clouds	Remarks
1	10° 15' N	101° 15' E	0800	10	28.5	1010.5	85	100	Clear
2	10° 30' N	101° 30' E	0900	12	29.0	1011.0	88	100	Clear
3	10° 45' N	101° 45' E	1000	14	29.5	1011.5	90	100	Clear
4	11° 00' N	102° 00' E	1100	16	30.0	1012.0	92	100	Clear
5	11° 15' N	102° 15' E	1200	18	30.5	1012.5	94	100	Clear
6	11° 30' N	102° 30' E	1300	20	31.0	1013.0	96	100	Clear
7	11° 45' N	102° 45' E	1400	22	31.5	1013.5	98	100	Clear
8	12° 00' N	103° 00' E	1500	24	32.0	1014.0	100	100	Clear
9	12° 15' N	103° 15' E	1600	26	32.5	1014.5	100	100	Clear
10	12° 30' N	103° 30' E	1700	28	33.0	1015.0	100	100	Clear
11	12° 45' N	103° 45' E	1800	30	33.5	1015.5	100	100	Clear
12	13° 00' N	104° 00' E	1900	32	34.0	1016.0	100	100	Clear
13	13° 15' N	104° 15' E	2000	34	34.5	1016.5	100	100	Clear
14	13° 30' N	104° 30' E	2100	36	35.0	1017.0	100	100	Clear
15	13° 45' N	104° 45' E	2200	38	35.5	1017.5	100	100	Clear
16	14° 00' N	105° 00' E	2300	40	36.0	1018.0	100	100	Clear
17	14° 15' N	105° 15' E	2400	42	36.5	1018.5	100	100	Clear
18	14° 30' N	105° 30' E	2500	44	37.0	1019.0	100	100	Clear
19	14° 45' N	105° 45' E	2600	46	37.5	1019.5	100	100	Clear
20	15° 00' N	106° 00' E	2700	48	38.0	1020.0	100	100	Clear
21	15° 15' N	106° 15' E	2800	50	38.5	1020.5	100	100	Clear
22	15° 30' N	106° 30' E	2900	52	39.0	1021.0	100	100	Clear
23	15° 45' N	106° 45' E	3000	54	39.5	1021.5	100	100	Clear
24	16° 00' N	107° 00' E	3100	56	40.0	1022.0	100	100	Clear
25	16° 15' N	107° 15' E	3200	58	40.5	1022.5	100	100	Clear
26	16° 30' N	107° 30' E	3300	60	41.0	1023.0	100	100	Clear
27	16° 45' N	107° 45' E	3400	62	41.5	1023.5	100	100	Clear
28	17° 00' N	108° 00' E	3500	64	42.0	1024.0	100	100	Clear
29	17° 15' N	108° 15' E	3600	66	42.5	1024.5	100	100	Clear
30	17° 30' N	108° 30' E	3700	68	43.0	1025.0	100	100	Clear
31	17° 45' N	108° 45' E	3800	70	43.5	1025.5	100	100	Clear
32	18° 00' N	109° 00' E	3900	72	44.0	1026.0	100	100	Clear
33	18° 15' N	109° 15' E	4000	74	44.5	1026.5	100	100	Clear
34	18° 30' N	109° 30' E	4100	76	45.0	1027.0	100	100	Clear
35	18° 45' N	109° 45' E	4200	78	45.5	1027.5	100	100	Clear
36	19° 00' N	110° 00' E	4300	80	46.0	1028.0	100	100	Clear
37	19° 15' N	110° 15' E	4400	82	46.5	1028.5	100	100	